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solution containing 1 g/l of Al100 silane and 5 g/l of titanium dioxide (sold under the name P25 by Degussa) held in suspension by appropriate means.

Please replace the paragraph at page 19, lines 27-37, with the following text:

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A circular specimen of web (diameter 100 mm) was placed at mid-height in a 300 ml beaker. The bottom and the edges of the receptacle having been rendered opaque, the beaker is illuminated by a bank of UV-A lamps (365 nm) delivering a power of 3.5 mW/cm² to the web. An aqueous solution (deionized water) containing 10 mg/l of phenol is poured into the device and is kept stirred magnetically. The decrease in concentration of the phenol is then monitored, samples being withdrawn at regular time intervals, by a UV spectrometer sold by Dr Lange.

IN THE CLAIMS

A clean copy of the claims incorporating any amendment is shown below.

Please amend Claims 1-18 and add new Claims 19-20 as follows:

1. (Amended) A substrate comprising:

a fibrous material; and

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a photocatalytic coating material coating at least a portion of the fibrous material and including a photocatalytic semi-conducting material and an adhesion promoter for promoting adhesion to the fibrous material, the photocatalytic semi-conducting material being selected from the group consisting of an oxide semi-conducting material and a sulphide semi-conducting material,

wherein the photocatalytic coating material coats fibers in the portion of the fibrous

material over a thickness of between 30 and 50 nm.

2. (Amended) The substrate according to Claim 1, wherein:

the photocatalytic semi-conducting material comprises titanium oxide which is at least partly crystalized in anatase form; and

the titanium oxide is in a form of one of particles in colloidal suspension and a powder.

3. (Amended) The substrate according to Claim 1, wherein the photocatalytic semi-conducting material comprises a titanium oxide from one of thermal decomposition of organometallic and at least one metal halide precursor.

4. (Amended) The substrate according to Claim 1, wherein the adhesion promoter comprises at least one of an organic material, an inorganic material, and an organic/inorganic hybrid material.

5. (Amended) The substrate according to Claim 1, wherein the adhesion promoter comprises a silicon-comprising component selected from the group consisting of silane, silicone and siloxane.

6. (Amended) The substrate according to Claim 1, wherein the adhesion promoter comprises at least one organic polymer selected from the group consisting of acrylic polymers and fluorinated polymers.

7. (Amended) The substrate according to Claim 1, wherein the adhesion promoter comprises at least one oxide selected from the group consisting of TiO_2 and SiO_2 from one of thermal decomposition of silicon-comprising, organometallic or metal halide precursor(s) within the photocatalytic coating material.

8. (Amended) The substrate according to Claim 1, wherein the adhesion promoter comprises at least one inorganic component selected from the group consisting of aluminium

phosphates, potassium aluminosilicates and calcium aluminosilicates.

9. (Amended) The substrate according to Claim 1, wherein the adhesion promoter forms part of a binder providing cohesion of the fibrous material.

10. (Amended) The substrate according to Claim 1, wherein the fibrous material comprises at least one of insulation mineral wool and reinforcing glass strands.

11. (Amended) The substrate according to Claim 1, wherein the fibrous material is one of web, felt, mould, paper and bulk material forms.

12. (Amended) The substrate according to Claim 1, wherein the photocatalytic coating material coats the fibers in the portion of the fibrous material over a thickness of at least 5 nm.

13. (Amended) A process for manufacturing a substrate, comprising:

depositing a liquid binder to bind fibers and form a fibrous material; and

depositing a photocatalytic coating material in liquid phase over at least a portion of the fibrous material such that the photocatalytic coating material coats fibers in the portion of the fibrous material over a thickness of between 30 and 50 nm, the photocatalytic material including a photocatalytic semi-conducting material and an adhesion promoter for promoting adhesion to the fibrous material, the photocatalytic semi-conducting material being selected from the group consisting of an oxide semi-conducting material and a sulphide semi-conducting material.

14. (Amended) The process according to Claim 13, wherein the depositing the photocatalytic coating material comprises depositing the photocatalytic coating material downstream of a fiberizing device before heat treatment/conditioning devices.

15. (Amended) The process according to Claim 13, wherein the depositing the photocatalytic coating material comprises depositing the photocatalytic material during a

conversion operation of the fibrous material into mats.

16. (Amended) The process according to Claim 13, wherein the depositing the photocatalytic coating material comprising depositing the photocatalytic coating material after converting the fibrous material into a finished product and before subjecting the finished product to a heat treatment.

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17. (Amended) The process according to Claim 13, wherein the depositing the photocatalytic coating material comprises one of spraying, coating and dip coating.

18. (Amended) The substrate according to Claim 1, wherein the fibrous material comprises one of a thermal insulation material, a sound insulation material, a liquid filter, a gas filter, a purifier, and a diffuser.

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19. (New) The substrate according to Claim 1, wherein the photocatalytic coating material comprises titanium oxide at least partially crystallized in anatase form.

20. (New) The substrate according to Claim 1, wherein the adhesive promoter further comprises at least one additive selected from the group consisting of an antioxidant, an ultraviolet absorber and a hindered amine light stabilizer.

REMARKS

Favorable consideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-20 are presently pending in this application, Claims 1-18 having been amended and Claims 19-20 having been newly added by the present amendment.

In the outstanding Office Action, the specification was objected to for informalities; Claims 1, 4 and 16 were objected to for informalities; Claims 1-18 were rejected under 35